

## SEQUENCE LISTING

8711000  
 <110> Keating, Mark T.  
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104

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105

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Tyr Val Leu Met Val Leu Gly Phe Phe Gly Phe Phe Thr Leu Gly Ile  
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 Tyr Ile Glu Ser Asp Ala Trp Gln Glu Lys Asp Lys Ala Tyr Val Gln  
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Arg Leu Leu Gly Ser Val Val Phe Ile His Arg Gln Glu Leu Ile Thr  
 35 40 45

Thr Leu Tyr Ile Gly Phe Leu Gly Leu Ile Phe Ser Ser Tyr Phe Val  
 50 55 60

Tyr Leu Ala Glu Lys Asp Ala Val Asn Glu Ser Gly Arg Val Glu Phe  
 65 70 75 80

123

Gly Ser Tyr Ala Asp Ala Leu Trp Trp Gly Val Val Thr Val Thr Thr  
 85 90 95

Ile Gly Tyr Gly Asp Lys Val Pro Gln Thr Trp Val Gly Lys Thr Ile  
 100 105 110

Ala Ser Cys Phe Ser Val Phe Ala Ile Ser Phe Phe Ala Leu Pro Ala  
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Gly Ile Leu Gly Ser Gly Phe Ala Leu  
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Glu Asp Glu Val Pro Asp Ile Thr Asp Pro Phe Phe Leu Ile Glu Thr  
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Cys Pro

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Glu Asp Thr Leu Asn Leu Pro Lys Ala Pro Val Ser Pro Gln Asp Lys  
 35 40 45

Ser Ser Asn Gln Ala Met Ser Leu Ala Ile Leu Arg Val Ile Arg Leu  
 50 55 60

Val Arg Val Phe Arg Ile Phe Lys Leu Ser Arg His Ser Lys Gly Leu  
 65 70 75 80

Gln Ile Leu Gly Arg Thr Leu Lys Ala Ser Met Arg Glu Leu Gly Leu  
 85 90 95

Leu Ile Phe Phe Leu Phe Ile Gly Val Val Leu Phe Ser Ser Ala Val  
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124

Tyr Phe Ala Glu Ala Gly Ser Glu Asn Ser Phe  
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Ser Phe Glu Leu Lys Arg Glu Thr Leu Val Ala Thr Asp Pro Pro Arg  
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Pro Thr Ile Asn Leu Asp Pro Arg Val Ser Ile Tyr Ser Gly Arg Arg  
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Pro Leu Phe Ser Arg Thr Asn Ile Gln Gly Arg Val Tyr Asn Phe Leu  
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Glu Arg Pro Thr Gly Trp Lys Cys Phe Val Tyr His Phe Thr Val Phe  
85 90 95  
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100 105 110  
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Gly Cys Arg Ser Lys Tyr Val Gly Val Trp Gly Arg Leu Arg Phe Ala  
145 150 155 160  
Arg Lys Pro Ile Ser Val Ile Asp Leu Ile Val Val Val Ala Ser Val  
165 170 175

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 180 185 190  
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 210 215 220  
 Arg Gln Glu Leu Ile Thr Thr Leu Tyr Ile Gly Phe Leu Gly Leu Ile  
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 245 250 255  
 Ser Gly Glu Tyr Gln Phe Gly Ser Tyr Ala Asp Ala Leu Trp Trp Gly  
 260 265 270  
 Val Val Thr Val Thr Thr Ile Gly Tyr Gly Asp Lys Val Pro Gln Thr  
 275 280 285  
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 290 295 300  
 Phe Phe Ala Leu Pro Ala Gly Ile Leu Gly Ser Gly Phe Ala Leu Lys  
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 Thr Leu Phe Trp Met Glu Ile Val Leu Val Phe Phe Gly Thr Glu  
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 Tyr Val Val Arg Leu Trp Ser Ala Gly Cys Arg Ser Lys Tyr Val Gly  
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Leu Ile Val Val Val Ala Ser Met Val Val Leu Cys Val Gly Ser Lys  
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 165 170 175  
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 180 185 190  
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 195 200 205  
 Tyr Gly Asp Lys Val Pro Gln Thr Trp Val Gly Lys Thr Ile Ala Ser  
 210 215 220  
 Cys Phe Ser Val Phe Ala Ile Ser Phe Phe Ala Leu Pro Ala Gly Ile  
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 His Phe Asn Arg Gln Ile Pro Ala Ala Ala Ser Leu Ile Gln Thr Ala  
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 275 280 285  
 Tyr Ile Arg Lys Ala Pro Arg Ser His Thr Leu Leu Ser Pro Ser Pro  
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 385 390 395 400  
 Arg Glu His His Arg Ala Thr Ile Lys Val Ile Arg Arg Met Gln Tyr  
 405 410 415  
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 420 425 430

Arg Asp Val Ile Glu Gln Tyr Ser Gln Gly His Leu Asn Leu Met Arg  
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Val Ile Lys Glu Leu Gln Arg Arg Leu Asp Gln Ser Ile Gly Lys Pro  
450 455 460

Ser Leu Phe Ile Ser Val Ser Glu Lys Ser Lys Asp Arg Gly Ser Asn  
465 470 475 480

Thr Ile Gly Ala Arg Leu Asn Arg Val Glu Asp Lys Val Thr Gln Leu  
485 490 495

Asp Gln Arg Leu Ala Leu Ile Thr Asp Met Leu His Gln Leu Leu Ser  
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Leu His Gly Gly Ser Thr Pro Gly Ser Gly Gly Pro Pro Arg Glu Gly  
515 520 525

Gly Ala His Ile Thr Gln Pro Cys Gly Ser Gly Gly Ser Val Asp Pro  
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ggc ggc cag ggc cgc gtc tac aac ttc ctc gag cgt ccc acc ggc tgg 162  
Gly Gly Gln Gly Arg Val Tyr Asn Phe Leu Glu Arg Pro Thr Gly Trp  
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Lys Cys Phe Val Tyr His Phe Ala Val Phe Leu Ile Val Leu Val Cys  
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Pro His Ile Thr Cys Asp Pro Pro Glu Glu Arg Arg Leu Asp His Phe	
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Ser Val Asp Gly Tyr Asp Ser Ser Val Arg Lys Ser Pro Thr Leu Leu	
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Glu Val Ser Met Pro His Phe Met Arg Thr Asn Ser Phe Ala Glu Asp	
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Leu Asp Leu Glu Gly Glu Thr Leu Leu Thr Pro Ile Thr His Ile Ser	
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Gln Leu Arg Glu His His Arg Ala Thr Ile Lys Val Ile Arg Arg Met	
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Gln Tyr Phe Val Ala Lys Lys Phe Gln Gln Ala Arg Lys Pro Tyr	
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Met Val Arg Ile Lys Glu Leu Gln Arg Arg Leu Asp Gln Ser Ile Gly	
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Lys Pro Ser Leu Phe Ile Ser Val Ser Glu Lys Ser Lys Asp Arg Gly	
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Ser Asn Thr Ile Gly Ala Arg Leu Asn Arg Val Glu Asp Lys Val Thr	
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Gln Leu Asp Gln Arg Leu Ala Leu Ile Thr Asp Met Leu His Gln Leu	
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Leu Ser Leu His Gly Gly Ser Thr Pro Gly Ser Gly Gly Pro Pro Arg	
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Glu Gly Ala His Ile Thr Gln Pro Cys Gly Ser Gly Gly Ser Val	
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Asp Pro Glu Leu Phe Leu Pro Ser Asn Thr Leu Pro Thr Tyr Glu Gln	
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 Glu Ile Val Leu Val Val Phe Phe Gly Thr Glu Tyr Val Val Arg Leu  
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 Arg Phe Ala Arg Lys Pro Ile Ser Ile Ile Asp Leu Ile Val Val Val  
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 Ala Ser Met Val Val Leu Cys Val Gly Ser Lys Gly Gln Val Phe Ala  
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 Thr Ser Ala Ile Arg Gly Ile Arg Phe Leu Gln Ile Leu Arg Met Leu  
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 Gly Leu Ile Phe Ser Ser Tyr Phe Val Tyr Leu Ala Glu Lys Asp Ala  
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 Val Asn Glu Ser Gly Arg Val Glu Phe Gly Ser Tyr Ala Asp Ala Leu  
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 Pro Gln Thr Trp Val Gly Lys Thr Ile Ala Ser Cys Phe Ser Val Phe  
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 275 280 285  
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 Pro Arg Ser His Thr Leu Leu Ser Pro Ser Pro Lys Pro Lys Lys Ser  
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 Lys Phe Gln Gln Ala Arg Lys Pro Tyr Asp Val Arg Asp Val Ile Glu  
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Thr Pro Gly Ser Gly Gly Pro Pro Arg Glu Gly Gly Ala His Ile Thr  
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